

SPAWAR

Systems Center

Charleston

the Navy's first systems integration environment

Leading the way through networking. . .

The information revolution has changed the very nature of warfare. The 21st century battlefield will use the advances in communication and computing technology to connect widely dispersed and diverse forces into an effective and coordinated team. No longer dependent on “passed-along” information, our forces will have a significant advantage with the ability to act on changing situations as they happen.



The Space and Naval Warfare (SPAWAR) Systems Command and its Systems Centers form a leading edge, network-centric — a virtual intranet having integrated information and applications available through a single window — corporation for designing, building, testing, fielding, and supporting the finest command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems in use today and planned for the future.

SPAWAR Systems Center Charleston...

recently celebrated the completion of the Navy's first custom-designed C4ISR facility — a unique 256,000-

square foot building located on the Charleston Naval Weapons Station Southside complex. From this building, Team SPAWAR is able to simulate and support real battle group and full-scale fleet exercises. Supporting SPAWAR's C4ISR systems integration environment, SPAWAR Systems Center Charleston uses the talents and resources of the entire command – a collection of processes, systems, and people – to provide fully integrated C4ISR solutions.

The command lab...

is the heart of the East Coast C4ISR systems integration environment and can be tailored to any configuration desired. With incredible capabilities, the command lab is the central network control point and functions as a command center, or a test and analysis center, whichever requirements dictate. Dedicated circuits connect Charleston with Norfolk, Va., and Patuxent River, Md., locations, as well as SPAWAR Systems Center San Diego, Calif., the primary West Coast node. By connecting our assets with various Navy, Joint, Allied, and non-DoD components, multi-systems sensor-to-shooter relationships can be exercised, tested, and evaluated.

A stepping stone into the future, this systems integration environment – some-





times called an integrated products center (IPC) – has a core architecture consistent with the Joint Technical Architecture's Information Technology for the 21st Century (IT-21) standards and the Defense Information Infrastructure Common Operating Environment.

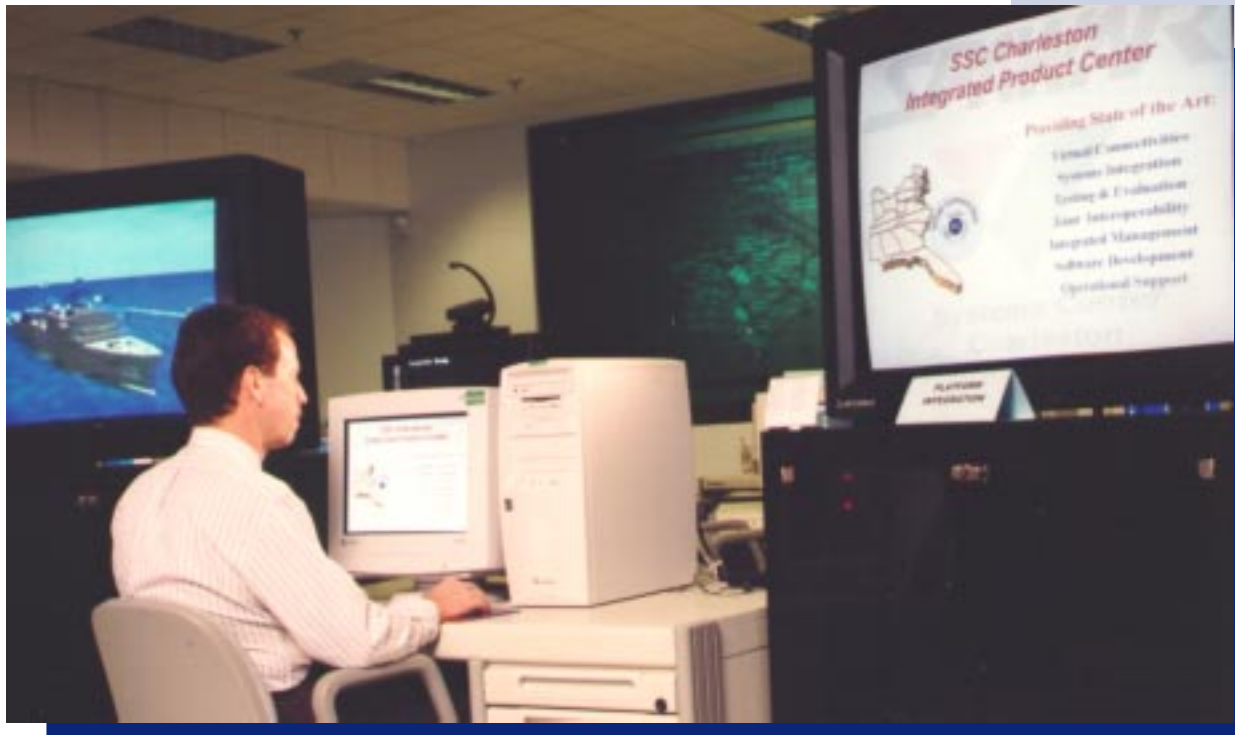
Various IT-21 enabling technologies connected in an operational-like environment allow Joint Maritime Command Information System/Global Command and Control System (JMCIS/GCCS-M), Joint Maritime Communications Systems (JMCOMS), tactical video teleconferencing (VTC), and network security applications to interoperate over SIPRnet, NIPRnet, and asynchronous transfer mode (ATM) networks.



Interfaced systems...

create operational configurations without physical relocation of equipment, and new system interfaces are explored and perfected before actual systems are built. Full-scale fleet scenarios are simulated to evaluate new technology with integrated C4ISR systems.

Simply stated, the IPC is a centralized data collection, test, and analysis point. The flexible configuration of the control room and multiple labs provides scaleable support for platform integration or testing, battle group simulation, and full-scale fleet exercises in one location. The command center operations allow warfighter involvement in C4ISR systems integration, training, and experimentation – an important part of maintaining battlespace dominance.



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The IPC offers:

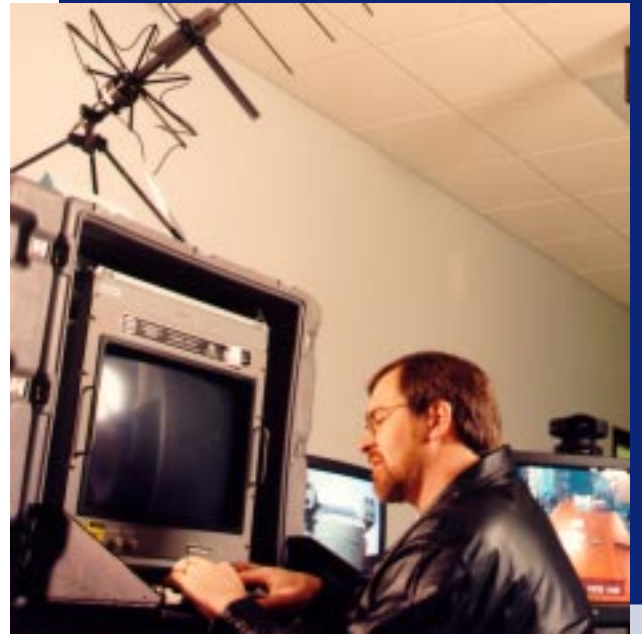
- State-of-the-art ATM network infrastructure;
- Worldwide connectivity;
- Multi-system sensor-to-shooter relationships;
- Simulated battle group and full-scale fleet exercises performed in a centrally located lab;
- Warfighter involvement (the warfighter plugs into the C4ISR systems integration environment and actively participates in the engineering process);
- Fully integrated C4ISR solutions and large scale platform integration critical for the next generation of sophisticated warfare platforms;

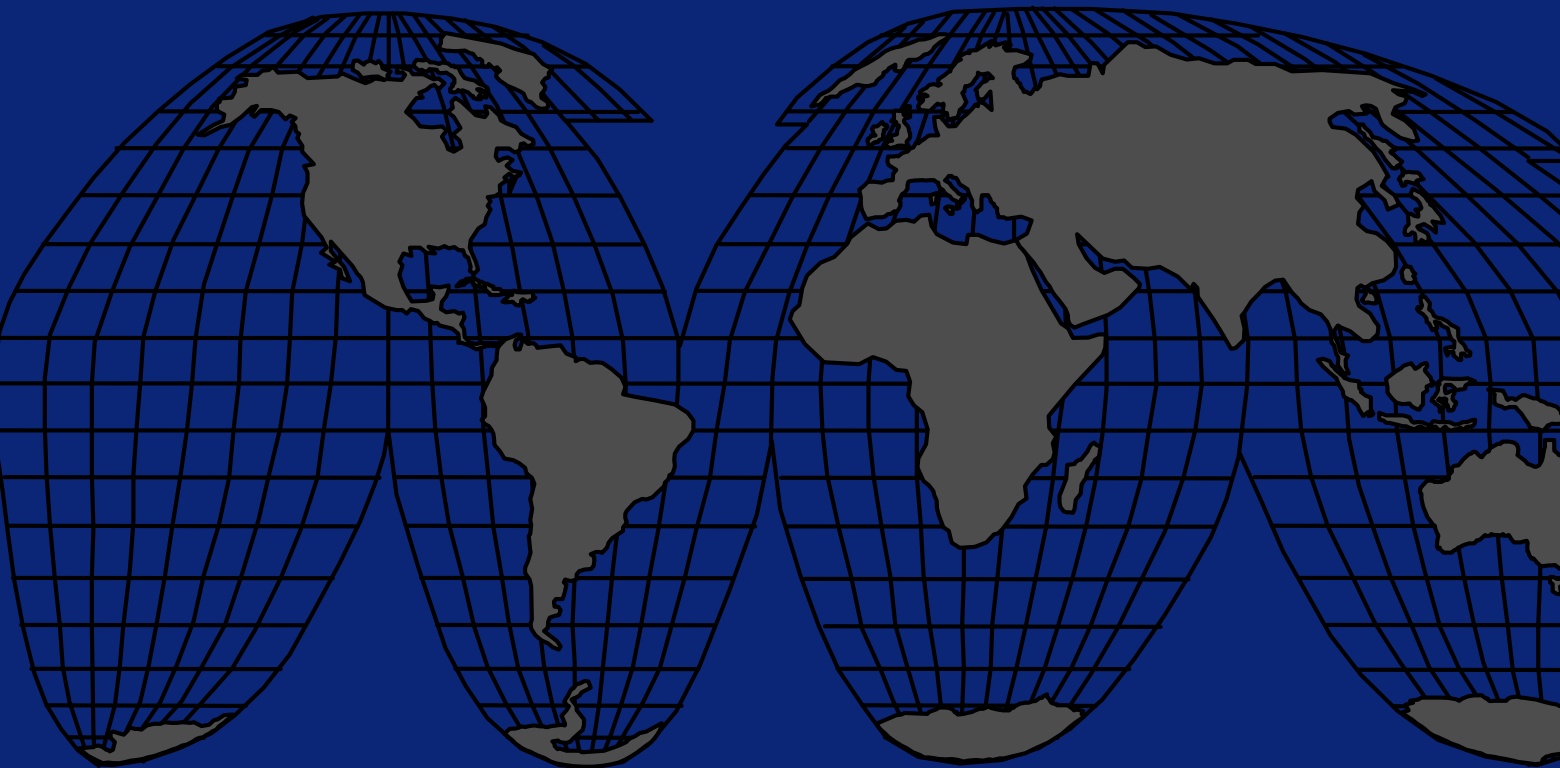


- Geographically dispersed systems integrated and operating as if they were collocated in a central integration facility;
- Standards and interoperability testing (by connecting various systems on the East and West coasts, relationships between multiple data links and the Global Command and Control System (GCCS) Common Operational Picture can be tested before and during the certification process;
- Technology insertion and industry involvement (vendors use the lab as a test bed, evaluating new technologies in an integrated environment); and
- An engineering environment that contributes to the development of smarter integrated systems and increased automation supporting new precision strike capabilities with reduced labor.

In an era of rapidly advancing technology, SPAWAR Systems Center Charleston's C4ISR systems integration environment enables the efficient investigation and satisfaction of complex customer requirements – ensuring battlespace dominance for the 21st century.

**For further information,
call 843-974-4274.**





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